

IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) A reagent vessel cap, comprising:

a sealing member made of an elastic body having radial slits from the center toward an outer periphery, is arranged on an opening of a vessel, and ~~supported with~~ in a cap body, for shielding a reagent contained in the vessel from outside air; and

a pressurizing member attached to the cap above the sealing member ~~[[has]]~~ comprising a through hole and ~~[[is]]~~ retained in position by the biasing force of a spring member firmly fixed between the pressurizing member and a fixing member arranged on the sealing member, for expanding the radial slits of the sealing member downwardly to open the vessel by ~~[[the]]~~ a pressure from above and returning ~~[[in]]~~ to position by relaxing of the pressure.

2. (Currently Amended) A reagent vessel cap, comprising:

a hollow-cylindrical cap body integrally molded of a female screw to be in engagement with a male screw formed around an outer periphery of ~~[[the]]~~ an opening of a vessel body, a flanged engaging part projecting axially thereabove, and an engaging protrusion around ~~[[the]]~~ an upper region of the outer periphery of the flanged engaging part;

a plate-like elastic sealing member integrally molded and arranged in the cap body, and ~~integrally molded of~~ comprising a plurality of slits extending from the center toward an outer periphery of the sealing member and an engaging part having an inverse L-shape in section around the outer periphery of the sealing member through a hinge;

a fixing member including a hollow cylinder and an engaging part formed around a lower region of ~~[[the]]~~ an outer periphery of the hollow cylinder, wherein ~~[[the]]~~ a lower ~~region of a~~

surface of the engaging part being arranged on the sealing member, and one end of a spring member is firmly fixed to an upper ~~region of the~~ surface of the engaging part; and

a pressurizing member integrally molded of:

a substrate having a through hole,

an outer cylinder provided around an outer periphery of the substrate as its inner periphery is in contact with the outer periphery of the cap body,

an inner cylinder provided along the through hole as its outer periphery is in contact with an inner periphery of the fixing member, the outer cylinder and the inner cylinder being vertically downwardly arranged , and

an engaging protrusion provided around the lower region of the inner periphery of the outer cylinder, the engaging protrusion of the outer cylinder being in engagement with the engaging protrusion of the cap body, wherein the other end of the spring member is firmly fixed between the outer cylinder and the inner cylinder of the pressurizing member,

wherein the pressurizing member is ~~always~~ positioned above the sealing member by the spring member, when the pressurizing member is pushed downward against a biasing force of the spring member, the pressurizing member is pushed downward with the cap body and the fixing member as guides, the end of the pressurizing member pushes the sealing member downward, so that the plurality of slits of the sealing member ~~are expanded~~ expand and open to communicate the content of the vessel with the exterior, and when the pressure to the pressurizing member is relaxed, the plurality of slits contract and the pressurizing member returns to position, so that the sealing member returns to its initial position by its elasticity ~~to bring the slits into close contact with each other~~, thereby shielding the content of the vessel from the exterior.

3. (Currently Amended) A reagent vessel cap according to Claim 1 or 2, wherein the sealing member having a thickness, and made of an elastic plate having a reasonable thickness to expand the slits and return its initial position by an elastic property of itself, is divided into four equal parts by the slits radially extending from the center toward the outer periphery.

4. (Currently Amended) A reagent vessel cap according to Claim 1 or 2, wherein the outer periphery of the pressurizing member further comprises a top surface, and

the slits formed in the sealing member have a length extending from the center of the sealing member to ~~the position with which the~~ [[rim]] top surface of the pressurizing member ~~is in contact.~~

5. (Currently Amended) A reagent vessel cap according to Claim 2, wherein the cap body is constructed such that ~~the rim of~~ the flanged engaging part of the fixing member extends downward around the inner periphery of the opening of the vessel body ~~extends downward~~ forming an extending part, and to be brought into contact with the inner periphery of the opening of the vessel body ~~so as to be retained to the vessel body by the extending part and the female screw.~~

6. (Currently Amended) A reagent vessel cap according to Claim 2, wherein the fixing member comprises the hollow cylinder, the flanged engaging part around the lower periphery of the hollow cylinder, and the spring member whose one end is firmly fixed to the upper surface of the flanged engaging part of the fixing member, ~~which~~ are integrally molded of plastic.

7. (Currently Amended) A reagent vessel cap according to Claim 2, wherein the pressurizing member has a thin part ~~at part of the upper periphery~~ projecting from a top surface thereof and a mark for indicating the thin part, and

~~wherein~~ by pushing the thin part, the engagement between the cap body and the outer cylinder is cancelled.

8. (Currently Amended) A method for shielding a reagent from outside air, comprising the steps of:

arranging a sealing member having a fixing member, and made of an elastic plate with radial slits from the center toward an outer periphery in an opening of a vessel body containing a reagent to a first position;

arranging a pressurizing member having a through hole above the sealing member, ~~which has a through hole and is retained~~ in the first position by ~~[[the]]~~ a biasing force of ~~[[a]]~~ at least one spring member firmly fixed between the pressurizing member and ~~[[a]]~~ the fixing member ~~arranged on~~ of the sealing member;

pushing the pressurizing member from above to expand the radial slits of the sealing member downwardly to a second position, thereby opening the vessel body to collect the reagent; and

relaxing the pressure from the second position ~~to return the pressurizing member to position and also~~ to return the expanded radial slits of the sealing member to ~~[[its]]~~ the first ~~initial~~ position by an elastic property of ~~itself~~ the sealing member, thereby contracting and

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bringing the radial slits into tight contact with each other to shield the reagent from outside air after the collection of the reagent.